

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A call admission control method in [[an ATM]] a switch, comprising:
 - receiving a QoS (Quality of Service) specified connection request;
 - calculating an assigned bandwidth on a link associated with the QoS-specified connection request;
 - calculating an average bandwidth ~~to be assigned to~~ of all existing QoS-unspecified traffic on the link associated with the QoS-specified connection request; and
 - determining whether the QoS-specified connection request is accepted based on a combination of the assigned bandwidth and the average bandwidth.
2. (previously presented) The call admission control method according to claim 1, wherein when calculating an average bandwidth, the average bandwidth on the link is obtained based on an average QoS-unspecified traffic of each QoS-unspecified virtual connection existing on the link associated with the QoS-specified connection request.
3. (previously presented) The call admission control method according to claim 2, wherein the average QoS-unspecified traffic is calculated by adding up existing QoS-unspecified traffic obtained at predetermined sampling time intervals.

4. (currently amended) The call admission control method according to claim 1, wherein calculating an average bandwidth comprises:

adding up existing QoS-unspecified traffic obtained at predetermined sampling time intervals to produce a first average QoS-unspecified traffic;

sequentially storing a first average QoS-unspecified traffic each time a corresponding QoS-unspecified connection is established at the [[ATM]] switch; and

calculating the average bandwidth by averaging a predetermined number of the stored first average QoS-unspecified traffic.

5. (currently amended) The call admission control method according to claim 1, wherein determining whether the QoS-specified connection request is accepted comprises:

adding the assigned bandwidth and the average bandwidth to produce a currently assigned bandwidth [[in]] on the link;

calculating an available bandwidth of the link by subtracting the currently assigned bandwidth from a full bandwidth of the link; and

determining whether the QoS-specified connection request is accepted, depending on a comparison of the available bandwidth and a requested bandwidth of the QoS-specified connection request.

6. (currently amended) [[A call]] An admission control system [[in an ATM switch having a plurality of links connected thereto]], comprising:

a traffic monitor for monitoring a QoS-unspecified traffic for each QoS-unspecified connection existing on [[each link]] a plurality of links;

a memory for storing a cell traffic management table containing an average QoS-unspecified traffic for each QoS-unspecified connection existing on [[each link]] the links; and

[[a call]] an admission manager for calculating an estimated bandwidth by adding up average QoS-unspecified traffic for all existing QoS-unspecified connections on a link associated with a QoS-specified connection request, wherein the estimated bandwidth is a bandwidth to be assigned to the existing QoS-unspecified connections on the link, and determining whether the QoS-specified connection request is accepted based on a combination of the estimated bandwidth and an assigned bandwidth that is already assigned in the link.

7. (currently amended) The [[call]] admission control system according to claim 6, wherein an average QoS-unspecified traffic is calculated by adding up existing QoS-unspecified traffic obtained at predetermined sampling time intervals.

8. (currently amended) The [[call]] admission control method according to claim 6, wherein the [[call]] admission manager adds the assigned bandwidth and the estimated bandwidth to produce a currently assigned bandwidth [[in]] on the link, calculates an available bandwidth of the link by subtracting the currently assigned bandwidth from a full bandwidth of the link, and determines whether the QoS-specified connection request is accepted, depending on a comparison of the available bandwidth and a requested bandwidth of the QoS-specified connection request.

9. (currently amended) [[A call]] An admission control system [[in an ATM switch having a plurality of links connected thereto]], comprising:

a traffic monitor for monitoring a QoS-unspecified traffic for each QoS-unspecified connection existing on [[each link]] a plurality of links;

a calculator for adding up existing QoS-unspecified traffic obtained at predetermined sampling time intervals to produce a first average QoS-unspecified traffic, and calculating an estimated bandwidth by averaging a predetermined number of the first average QoS-unspecified traffic for existing QoS-unspecified connections on a link associated with a QoS-specified connection request, where the estimated bandwidth is a bandwidth to be assigned to the existing QoS-unspecified connections on the link;

a memory for storing a cell traffic management database sequentially containing a first average QoS-unspecified traffic each time a QoS-unspecified connection is established [[at the ATM switch]]; and

[[a call]] an admission manager for determining whether the QoS-specified connection request is accepted based on a combination of the estimated bandwidth and an assigned bandwidth that is already assigned [[in]] on the link.

10. (currently amended) The [[call]] admission control method according to claim 9, wherein the [[call]] admission manager adds the assigned bandwidth and the estimated bandwidth to produce a currently assigned bandwidth [[in]] on the link, calculates an available bandwidth of the link by subtracting the currently assigned bandwidth from a full bandwidth of

the link, and determines whether the QoS-specified connection request is accepted, depending on a comparison of the available bandwidth and a requested bandwidth of the QoS-specified connection request.

11. (new) An admission control system, comprising:
a controller to receive a QoS (Quality of Service) specified connection request associated with a link; and
an admission manager to:
determine an assigned bandwidth on the link,
determine an average bandwidth of all existing QoS-unspecified traffic on the link, and
determine whether the QoS-specified connection request is accepted based on a combination of the assigned bandwidth and the average bandwidth.

12. (new) The admission control system according to claim 11, wherein the average bandwidth on the link is determined based on an average QoS-unspecified traffic of each QoS-unspecified virtual connection existing on the link.

13. (new) The admission control system according to claim 12, wherein the average QoS-unspecified traffic is determined by adding up existing QoS-unspecified traffic obtained at predetermined sampling time intervals.

14. (new) The admission control system according to claim 11, wherein the average bandwidth is determined by:

adding up existing QoS-unspecified traffic obtained at predetermined sampling time intervals to produce a first average QoS-unspecified traffic,

sequentially storing a first average QoS-unspecified traffic each time a corresponding QoS-unspecified connection is established, and

calculating the average bandwidth by averaging a predetermined number of the stored first average QoS-unspecified traffic.

15. (new) The admission control system according to claim 11, wherein when determining whether the QoS-specified connection request is accepted, the admission manager is configured to:

add the assigned bandwidth and the average bandwidth to produce a currently assigned bandwidth on the link,

calculate an available bandwidth of the link by subtracting the currently assigned bandwidth from a full bandwidth of the link, and

determine whether the QoS-specified connection request is accepted, depending on a comparison of the available bandwidth and a requested bandwidth associated with the QoS-specified connection request.

16. (new) An admission control system, comprising:

means for receiving a QoS (Quality of Service) specified connection request;

means for determining an assigned bandwidth on a link associated with the QoS-specified connection request;

means for determining an average bandwidth of all existing QoS-unspecified traffic on the link;

means for adding the assigned bandwidth and the average bandwidth to produce a currently assigned bandwidth on the link;

means for determining an available bandwidth of the link by subtracting the currently assigned bandwidth from a full bandwidth of the link; and

means for determining whether the QoS-specified connection request is accepted, depending on a comparison of the available bandwidth and a requested bandwidth associated with the QoS-specified connection request.